WHAT IS CLAIMED IS:

1. Electronic equipment, comprising

a bus;

an interface unit for digital serial data connected to said bus, said interface unit having a physical layer in conformity with the IEEE 1394 standard;

at least one partner connected to said bus, each said connected partner having a physical layer which conforms to the IEEE 1394 standard; and

a processor connected to said interface unit;

said interface unit including

a transmitter for transmitting an arbitration signal to each said connected partner, and a receiver for receiving an arbitration signal from each said connected partner,

wherein, in a bus initialization phase, a bus reset signal is sent to each said connected partner for a predetermined period of time in a reset start state of said interface unit, and when it is acknowledged that a specified period of time has elapsed and bus reset signals have been received from each said connected partner, said interface unit is transferred to a reset wait state.

2. Electronic equipment according to claim 1,

wherein said interface unit further includes a decoder for decoding a receive arbitration state from said

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transmitted arbitration signals and said received arbitration signals, and

said decoder performs bus reset and decoding for said receive arbitration state without depending on said transmitted arbitration signals when said decoder receives said bus reset signal from each said connected partner as said arbitration signal.

3.   Electronic equipment according to claim 1, wherein said interface unit conducts duplex transmission with each said connected partner.

4.   A method for bus initialization in an interface unit for digital serial data having a physical layer in conformity with the IEEE 1394 standard, the interface unit being connected by a bus to at least one partner having a physical layer which conforms to the IEEE 1394 standard, the method comprising:

transmitting a bus reset signal to each connected partner for a predetermined period of time in a reset start state of the interface unit; and

transferring the state of the interface unit to a reset wait state when it is acknowledged that bus reset signals have been received from each connected partner and a specified period of time has elapsed.

5.   The method according to claim 4, further comprising:

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decoding a receive arbitration state from an arbitration signal transmitted to each connected partner and an arbitration signal received from each connected partner,

wherein, in the decoding step, bus reset and decoding for the receive arbitration state are performed without depending on the transmitted arbitration signal when a bus reset signal is received from each connected partner as the arbitration signal.